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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,332	05/04/2001	Matitiyahu Amit	TI-30016	9229
23494	7590	05/10/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			LEVITAN, DMITRY	
P O BOX 655474, M/S 3999				
DALLAS, TX 75265			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/849,332	Applicant(s) AMIT ET AL.	
	Examiner Dmitry Levitan	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 6-9 is/are allowed.
6) ☒ Claim(s) 1,2,4,5 and 10-12 is/are rejected.
7) ☒ Claim(s) 3 and 13 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 04 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/15/02</u> | 6) <input type="checkbox"/> Other: _____ |

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Preliminary amendment, filed 05/04/01, has been entered. Claims 1-13 remain pending.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: SO_ON – Sn-ON. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to, because abbreviations or acronyms ISI are cited throughout the specification without explanation. Applicant should provide a full explanation for the acronyms at least at their first occurrence in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran (US 5,453,987).

5. Regarding claims 1 and 10, Tran substantially teaches the limitations of claims 1 and 10, A method and a system of data communication between multiple stations on a network (plurality of terminals 112 and 122 on Fig. 2 and 3:26-40), using shared media (common communication channel 116 on Fig. 2 and 3:26-40, wherein the common channel comprises wired bus, optical cable or over-the-air channel), comprising the steps

assigning priorities to each station (establishing priority of users to define the access priority to the communication channel 4:25-40),

Transmitting at least one burst of network communication data, each burst having a source preamble and a destination address (transmitting packets with preamble disclosed on Table 1 including the individual addresses of the transmitting terminals 5:30-63, and inherently the destination address, because destination address is essential for any packet to identify the recipient of the packet),

Resolving collision among transmitting stations via algorithmic relationship between station priorities and source preambles (terminal with higher priority winning the contended slot for transmission 5:60-6:1) and

Detecting a destination station via destination address (inherently part of the system, because destination address is essential for any packet to identify the recipient of the packet).

Tran does not teach including the destination data into preamble.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the destination data into preamble of the system of Tran to make the system faster, because without the destination address in the beginning/preamble of each packet, it is unclear which terminal should start the collision resolution algorithm and the terminals will be idle until the destination address is received.

In addition, regarding claim 10, Tran teaches steps:
radio carrier sensing (the system implementation by over-the-air broadcast channel using radio-frequency techniques 3:34-38),
source recognition and generating source recognition data (recognizing a source/address of the transmitting terminal as in Table 1 and 5:30-63),
collision resolution (resolving the terminals contention for the same slot 5:62-6:1), and
destination detection (inherently part of the system, because detecting destination address is essential for any terminal in the packet system to receive a packet).
Tran teaches implementation of his system (see system claim 12 of Tran), however Tran does not teach implementation of the steps disclosed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method Tran into a data communication system, to utilize the method advantages of collision resolution in the shared media.

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6. Regarding claim 2, Tran teaches resolving collision interrogating the source preambles and station priorities and halting transmission by stations with lesser priorities (utilizing table 1 and priority bits in contention for the transmitting priority 5:30-6:1).

7. Claims 3, 4, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran in view of Wilson (US 4,766,536).

Tran substantially teaches the limitations of parent claim 1 (see rejection of claim 1 above).

Tran does not teach sampling and storing sampled destination preamble in a storage buffer for decoding at a station rate.

Wilson teaches sampling and storing sampled destination preamble in a storage buffer (storing the received packet at buffer 70 on Fig. 10 and 9:1-24, separating the header, comprising the destination preamble, from data) and processing the received header of the packet for decoding at a station rate (dividing the header into sections in communication with the home processor 9:12-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add method of Wilson to the system of Tran to improve the system maintainability by providing it with status sections to indicate the operation of the other nodes of the system 9:19-22.

Regarding claim 12, Tran substantially teaches the limitations of claims 12, by assigning priority levels to transmitting and receiving stations (5:30-6:7).

Tran does not teach assigning the unique priority level to the stations.

Wilson teaches assigning a unique priority to each node/station 6:59-65.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to add teachings of Wilson to the system of Tran to improve the system speed, by avoiding any possible collisions between stations with identical priorities.

Allowable Subject Matter

8. Claims 6-9 are allowed.
9. Claims 3 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'DL' followed by a stylized name.

Dmitry Levitan
Patent Examiner.
05/06/05